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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/768,548

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Hans Peter Nageli

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EXAMINER

HUNNINGS, TRAVIS R

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/768,548	<b>Applicant(s)</b> NAGELI, HANS PETER	
	<b>Examiner</b> Travis R. Hunnings	<b>Art Unit</b> 2632	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,7-12,18-21,23,24 and 34-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7-12,18-21,23,24 and 34-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 8-12, 19-21, 23, 24, 34-40 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Patent 6,700,493) in view of Galley, III et al. (Galley; US Patent 6,975,224).

Regarding claim 1, Robinson discloses *Method, Apparatus And System For Tracking, Locating And Monitoring An Object Or Individual* that has the following claimed limitations:

The claimed central server is met by the host computer (abstract);

The claimed portable detachable tracking unit is met by the transceiver unit (column 8, lines 30-54);

The claimed antenna arrangement that is capable of communication with both a GPS satellite and a two-way satellite is met by the transceiver unit communicating with a two-way communications satellite and global positioning satellites (column 8, lines 30-54);

The claimed processing device is met by the microprocessor (column 6, lines 16-30);

The claimed GPS receiver for receiving signals from the GPS satellite is met by the transceiver unit communicating with the global positioning units and therefore it would be obvious that the unit has a GPS receiver for receiving the GPS signals (column 8, lines 30-54);

The claimed transmitter and receiver for communicating with the central server via the two-way satellite is met by the transceiver communicating with the communication satellites for enabling the communication (column 8, lines 30-54);

The claimed internal power supply of the tracking unit being provided by one of a fuel cell and battery is met by the battery backup (column 6, lines 16-30). It would have been obvious to one of ordinary skill in the art to use any desired form of power including a fuel cell or a fuel cell in addition to a battery;

The claimed housing is met by the transceiver unit as shown in figures 2A, 2B and 2C;

The claimed means for attaching and detaching the tracking unit to the shipping container is met by the mounting flanges for attaching the device (column 5, lines 15-35);

Though Robinson does not specifically disclose the claimed modem it would have been obvious for one ordinary skilled artisan at the time the invention was made to readily recognize that in order to provide modulation/demodulation for the transmit and receive operations. Robinson would obviously provide a modem to carry out its intended function.

Robinson does not specifically disclose the claimed detecting means for detecting when the tracking unit has been detached from a shipping container and been tampered with and communicating that information via the two-way satellite to the central server. Galley discloses *Reusable Self Contained Electronic Device Providing In-Transit Cargo Visibility* that teaches detecting means in the form of a light sensor cable or lock sensor that cause the device to transmit tampering messages to a central server when the device has been tampered with (one of ordinary skill in the art would realize that detachment is a form of tampering) (column 10, lines 46-55). Adding detecting means to Robinson would make the device more secure and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Galley to include detecting means that cause the device to communicate to the central server that tampering has occurred at the device.

Regarding claim 8, Robinson does not specifically disclose the claimed tracking unit being attached to the locking bars so that the locking bars can not be unlocked without first detaching the tracking unit. Galley teaches the mechanical mounting and locking mechanism fitting over a bar associated with the exterior of a truck or shipping container (column 5 lines 27-36). Modifying the device of Robinson to attach to the exterior bars of the container would increase the security of the device by requiring it to be properly removed before the door can be opened. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device

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disclosed by Robinson according to the teachings of Galley to attach the device to the locking bar of the container.

Regarding claim 9, the claim is interpreted and rejected as claim 8 stated above.

Regarding claim 10, the claimed tracking unit being attached to at least one locking bar by a special fastener that can not be released without using a special tool is met by the transceiver unit being attached using the mounting flanges (column 5, lines 15-35). The unit can be mounted using any kind of special attachment tool the user desires.

Regarding claim 11, the claimed antenna in the tracking unit is located in the vertical position in relation to the surface of the earth in order to better transmit and receive communications would have been a design choice by the user. Through routine experimentation the user would have found the most desirable position to mount the antenna in order to enable better communication with the satellites.

Regarding claim 12, the claim is interpreted and rejected as claim 1 stated above.

Regarding claim 19, the claim is interpreted and rejected as claim 11 stated above.

Regarding claim 20, the claimed cushioning material that is placed between the back of the tracking unit and a door of the shipping container would have been obvious in view of a gasket in order to protect the paint of the shipping container to which the device is attached.

Regarding claim 21, The claimed antenna that is capable of communication with both a GPS satellite and a two-way satellite is met by the transceiver unit communicating with a two-way communications satellite and global positioning satellites (column 8, lines 30-54);

The claimed processing device is met by the microprocessor (column 6, lines 16-30);

The claimed GPS receiver for receiving signals from the GPS satellite is met by the transceiver unit communicating with the global positioning units and therefore it would be obvious that the unit has a GPS receiver for receiving the GPS signals (column 8, lines 30-54);

The claimed transmitter and receiver for communicating with an internal power supply provided by at least one interconnected fuel cell and battery for a central server via the two-way satellite is met by the transceiver communicating with the communication satellites (column 8, lines 30-54). The claimed internal power supply provided by at least one interconnected fuel cell and battery is met by the battery backup (column 6, lines 16-30). It would have been obvious to one of ordinary skill in

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the art to use any desired form of power including a fuel cell or a fuel cell in addition to a battery;

The claimed housing is met by the transceiver unit as shown in figures 2A, 2B and 2C;

The claimed means for attaching and detaching the tracking unit to the shipping container is met by the mounting flanges for attaching the device (column 5, lines 15-35);

It would have been obvious to one of ordinary skill in the art to include a modem within the device to provide a backup communication medium in case the two-way satellite communication link was down.

Robinson does not specifically disclose the claimed tracking unit being attached to the locking bars so that the locking bars can not be unlocked without first detaching the tracking unit. Galley teaches the mechanical mounting and locking mechanism fitting over a bar associated with the exterior of a truck or shipping container (column 5 lines 27-36). Modifying the device of Robinson to attach to the exterior bars of the container would increase the security of the device by requiring it to be properly removed before the door can be opened. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Galley to attach the device to the locking bar of the container.



Regarding claim 23, Robinson does not specifically disclose the claimed detecting means for detecting when the tracking unit has been detached from a shipping container and been tampered with and communicating that information via the two-way satellite to the central server. Galley discloses *Reusable Self Contained Electronic Device Providing In-Transit Cargo Visibility* that teaches detecting means in the form of a light sensor cable or lock sensor that cause the device to transmit tampering messages to a central server when the device has been tampered with (one of ordinary skill in the art would realize that detachment is a form of tampering) (column 10, lines 46-55). Adding detecting means to Robinson would make the device more secure and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Galley to include detecting means that cause the device to communicate to the central server that tampering has occurred at the device.

Regarding claim 24, the claimed tracking unit further including a battery that powers those components which need to be on to receive messages from the central server via the two-way satellite and to power a clock and to turn other electrical components on that are powered by another source of power and a fuel cell that powers all components not powered by the battery is met by the transceiver unit being hard-wired for power and having a battery backup that powers the components when the hard-wired power is not active (column 6, lines 58-61). It would have been obvious to use any kind of power source for the hard-wired power source including a fuel cell.

Regarding claim 34, the claim is interpreted and rejected as claim 11 stated above.

Regarding claim 35, the claim is interpreted and rejected as claim 20 stated above.

Regarding claim 36, the claimed tracking unit having means to shut down part of the electronic components and waking them up upon the occurrence of certain events or a command received from the central server is met by the sleep mode initiating automatic shutdown in order to save power and waking them up in response to a trigger input (column 10, lines 11-35).

Regarding claim 37, Robinson discloses all of the claimed limitations except for the claimed means to connect to a nearby computer with access to the tracking unit being programmed to only grant access pursuant to a secret code, said tracking unit being capable of being programmed by the nearby computer to carry out certain functions and to transmit certain information. Galley teaches programming through access codes using auxiliary input devices such as a PDA (column 5, lines 37-45). Adding programming functionality through devices like a PDA would increase the functionality and ease-of-use of the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed

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by Robinson according to the teachings of Galley to utilize a nearby computer to access the device through a secret code and then to program the device.

Regarding claim 38, the claim is interpreted and rejected as claim 20 stated above.

Regarding claim 39, Robinson discloses all of the claimed limitations except for the claimed at least some of the electrical connections for the various electrical components being an integral part of the housing. Galley teaches the electrical components being a part of the housing as seen in figure 2. Modifying the device to be like Galley would make it easier to attach to the door of the vehicle and also provide extra security and tamper detection. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Galley to have at least some of the electrical components be an integral part of the housing.

Regarding claim 40, the claim is interpreted and rejected as claim 39 stated above.

Regarding claim 43, the claim is interpreted and rejected as claim 1 stated above.

3. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Galley and further in view of Janky et al. (Janky; US Patent 5,751,245).

Regarding claim 7, Robinson and Galley discloses all of the claimed limitations except for the claimed tracking unit having a memory capable of receiving and storing geo-fencing information on the specified route to its destination and the processing device is programmed to determine if the tracking unit is outside of the geo-fence and to communicate that information to the central server via the two-way satellite. Janky discloses *Vehicle Route And Schedule Exception Reporting System* that teaches a route exception reporting system that reports to a central monitoring center when a vehicle that is being tracked deviates from a predetermined path that is stored in the memory of the unit on the vehicle (abstract). Adding the functionality of Janky to Robinson and Galley would give the user even more abilities regarding the safety and security of the container by being alerted when the vehicle deviates from a particular planned course and taking appropriate action. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson and Galley according to the teachings of Janky to include a memory that stores a planned route and reporting any deviations from that route to the central server.

Regarding claim 18, the claim is interpreted and rejected as claim 7 stated above.

4. Claims 41, 42 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Galley and further in view of Boman et al. (Boman; US Patent Application Publication 2004/0100379).

Regarding claim 41, Robinson and Galley disclose all of the claimed limitations except for the claimed unit having GSM communication capability. Boman discloses *Method And System For Monitoring Containers To Maintain The Security Thereof* that teaches communication through networks including UMTS, GSM, WLAN and many other communication protocols (paragraph 51). Using any of the protocols taught by Boman in the device of Robinson and Galley would increase the functionality of the device by allowing it to communicate with many different types of systems. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson and Galley according to the teachings of Boman to use GSM for communication.

Regarding claims 42 and 44-46, the claims are interpreted and rejected as claim 41 stated above.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 7-12, 18-21, 23, 24 and 34-46 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

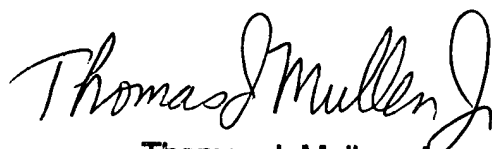
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRH

A handwritten signature in black ink, reading "Thomas J. Mullen, Jr.", with a stylized, cursive script.

Thomas J. Mullen, Jr.  
Primary Examiner  
Art Unit 2632

3-6-06